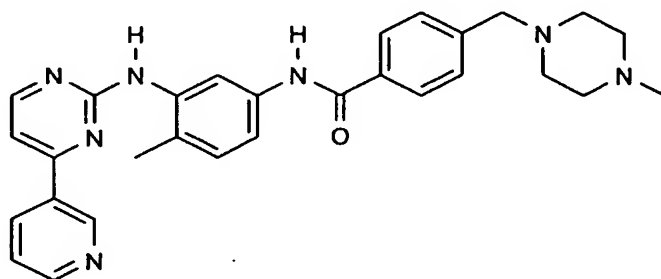


**CLAIMS:**

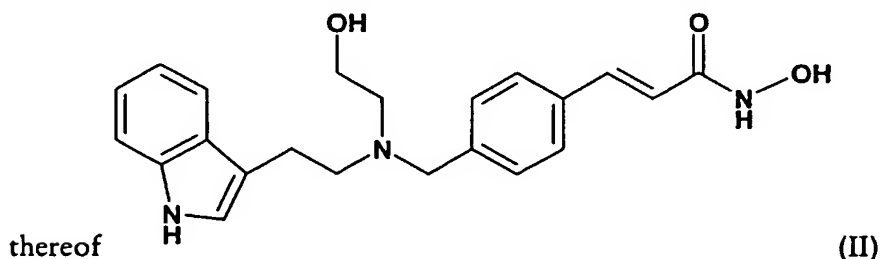
1. A combination for simultaneous, separate or sequential use which comprises (a) N-[5-[4-(4-methyl-piperazino-methyl)-benzoylamido]-2-methylphenyl]-4-(3-pyridyl)-2-pyrimidine of formula I



(I)

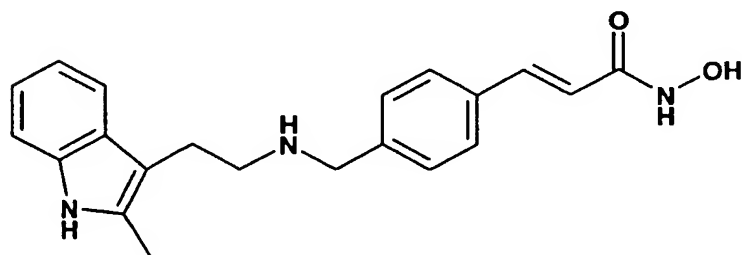
or a pharmaceutically acceptable salt thereof and (b) at least one histone deacetylase inhibitor in free form of in a pharmaceutically acceptable salt form thereof and optionally at least one pharmaceutically acceptable carrier.

2. A combination according to claim 1 wherein (b) is selected from the group consisting of sodium butyrate, MS-275, SAHA, aphacidin, depsipeptide, FK 228, trichostatin A, Compound of formula II or a pharmaceutically acceptable salt



(II)

and Compound of formula III or a pharmaceutically acceptable salt thereof,



(III),

and optionally at least one pharmaceutically acceptable carrier.

3. The combination according to claim 2 wherein (b) is selected from the group consisting of sodium butyrate, SAHA, Compound of formula II and Compound of formula III.
4. Use of a combination according to anyone of claims 1 to 3 in the treatment of a leukemia.
5. Use of a combination according to any one of claims 1 to 3 for the preparation of a medicament in the treatment of a leukemia.
6. Use of a combination according to any one of claim 4 or 5 wherein the leukemia is a Compound I-resistant leukemia.
7. A method of treating a warm-blooded animal having a leukemia comprising administering to the animal a combination according to any one of claims 1 to 3 in a quantity which is jointly therapeutically effective against said leukemia and in which the compounds can also be present in the form of their pharmaceutically acceptable salts.
8. A pharmaceutical composition comprising a quantity which is jointly therapeutically effective against a leukemia of a pharmaceutical combination according to claim 1 to 3 and at least one pharmaceutically acceptable carrier.
9. A commercial package comprising a combination according to any one of claims 1 to 3 together with instructions for simultaneous, separate or sequential use thereof in the treatment of a leukemia.
10. The method according to claim 7, the pharmaceutical composition according to claim 8 and the commercial package according to claim 10 wherein leukemia is Compound I-resistant leukemia.